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LEADING ARTICLES

GASTROGENIC DIARRHEA.*

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DIARRHEA is a symptom of a disease that induces abnormal frequency and liquidity of fecal discharges. Gastrogenic diarrhea is a condition in which a perversity in the secretion or the motility of the stomach is the etiologic factor. Many cases of stomach disorder manifest themselves by symptoms suggesting intestinal disease. This has been frequently shown during the last ten years, by an examination of the stomach content, showing abnormal secretion or an interference with motility. We may have all degrees of decreased secretion of gastric juice or the direct opposite may be the case showing a hyperchlorhydria. Both conditions may or may not be associated with atony and interference with motility. An examination of the feces after a test-diet shows that the food stuff is inadequately digested. On account of some perversity in the secretion of gastric juice, food undergoes fermentation or putrefaction, and an undigested mass is emptied into the duodenum. The mucous membrane of the duodenum unaccustomed to receive a decomposed mass is irritated and this produces diarrhea.

It is not always clear why intestinal disturbances frequently mask severe stomach trouble. The attacks of diarrhea are dependent upon the digestive strength and the resisting power of the intestine. In gastrogenic diarrhea there is an insufficiency of the preparation of the food in the stomach. Patients may have stomach trouble for years, but not severe enough to induce them to consult a physician until they are suddenly taken with a diarrhea. When the stomach does not do its work properly too much is demanded of the intestine. The intestine may do the work of the stomach for years without any apparent difficulty. The intestine carries on this increased work under unfavorable condition, being subjected to abnormal irritation by the food that has not been properly prepared by the stomach. In consequence of abnormal fermentation the mucous membrane is irritated which induces diarrhea.

The reaction of the food in the stomach influences the contraction and relaxation of the pyloric sphincter. Free hydrochloric acid in the stomach opens the pylorus. The acid chyme acting on the intestinal mucosa reflexly closes the pylorus. As the pylorus closes, the pancreatic juice and bile gradually neutralize the acid chyme, and this allows the free acid in the stomach to again open the pylorus and a new supply of the stomach content enters the duodenum. On account of this great acidity the intestine is never overburdened with too much food at one time. As soon as a certain amount of the acid stomach content enters the duodenum the pylorus closes to prevent any more from passing through until the pancreatic juice has had time to act upon the food in the intestine. Proteids take up a great deal of hydrochloric acid and require a longer time to give a reaction for free hydrocholric acid than the carbohydrates. For this reason the pylorus opens sooner after a carbohydrate diet than a proteid diet. In cases in which hydrochloric aicd is secreted in insufficient quantities the pylorus relaxes and allows the stomach content to empty itself into the duodenum when there is not enough acid in the duodenum to reflexly close the pylorus, and thus the duo-

*Read before the Michigan State Medical Society, at Jackson, Mich., May 24, 1906.

denum is over-burdened and the intestinal mucosa irritated, which leads to a condition that superinduces gastrogenic diarrhea.

The acid chyme poured into the duodenum stimulates the flow of pancreatic juice. If the secretion of hydrochloric acid in the stomach is in any way inhibited there is a reduction in the secretion of the pancreas. The secretion of the pancreatic juice is brought about by a substance called secretin. The hydrochloric acid from the stomach produces this secretin in the intestine from some unknown substance, and after being absorbed has the power of increasing the secretion of pancreatic juice. We can readily see how an anomaly in the secretion of hydrochloric acid in the stomach would inhibit the secretion of pancreatic juice and thus set up diarrhea.

Schmidt (1) has proved this by giving a test-diet and then examining the feces. He found that raw connective tissue was normally digested in the stomach and that the pancreatic juice had no effect upon such connective tissue. He says, "That these observations are not isolated, and that gastrogenic intestinal disturbances are extremely frequent, and therefore have a great practical significance, must be obvious to any one who has systematically employed my functional examination. The appearance of macroscopically recognizable remains of connective tissue in the feces after the test-diet is a simple as well as a reliable sign of this disturbance and it indicates that the stomach in the particular case is unable to perform the work which must be expected of it. In my fecal investigation I myself have come upon undigested connective tissue remains so often that I do not hesitate to declare the stomach to be frequently the point of origin of the most varied intestinal disturbances. I purposely say the most varied, for, as already pointed out above, remains of connective tissue are found not only in cases of diminished hydrochloric acid secretion—although undoubtedly they occur here most frequently, one might say constantly—but also under the opposite circumstances. How the failure to digest the connective tissue is to be explained in all these cases, is not yet determined. It is at once intelligible in achylia, but in cases of hyperacidty it is a deficient pepsin secretion, which we know can occasionally happen in spite of increased hydrochloric acid secretion. Where the motility is reduced processes of decomposition may be involved, etc. The work of the intestine, if we disregard the presence of undigested connective tissue, need not necessarily be altered; the connective tissue can permeate feces that are otherwise normal. More often the feces are not normal in other respects, being soft and mushy to a liquid or containing mucus and showing signs of decomposiiton. Similarly results of stomach affections on the intestine are not uniform; they can vary from the slightest functional deviations to the severest catarrhs, according to the duration of the condition, the sensibility of the intestine, the care which the patient gives himself, etc. When pronounced intestinal affections are present, the symptoms may become so prominent as to determine completely the appearance of the disease, while achylia, which is well known, frequently occurs without any symptoms suggesting disturbances on the part of the stomach. In the fact that the connective tissue test in these instances at once leads us on to the right path, lies its value. It has, however, a greater advantage, in that it reveals the danger threatening the intestines when nothing else indicates it, when only now and then subjective symptoms or rapidlly subsiding intestinal irritations appear, which, without this test, would be overlooked entirely."

Sahli has given us a simple test of the chemistry of the stomach in cases of gastrogenic diarrhea without inflicting on the patient the discomfort of the stomach tube. The patient is to swallow a little iodoform or methylene blue wrapped in a small square of rubber tissue tied with a piece of raw catgut. If the chemic functions of the stomach are normal, the catgut is soon dissolved in the gastric secretions, and the appearance of the blue in the urine or the iodin in the urine and saliva testifies to the normal digesting power of the stomach juices. The little bag is swallowed after a meal and the absence of any reaction is proof that the bag was either passed along before the gastric juice acted on it or that the secretory functions of the stomach are defective.

It was at first believed that the cause of gastrogenic diarrhea was to be looked for in the absence of the antiseptic action of the hydrochloric acid in the stomach. But hydrochloric acid is not the all determining factor in preventing processes of decomposition in the intestine, as can be seen from the many patients with achylia who do not get intestinal disturbances; and besides, we see frequently strong decomposition in the stomach itself where hydrochloric acid is present. There is no doubt that the origin of these fermentations in the stomach is due to disturbances of the motor activity, and is of greater significance than disturbances of the chemic processes. Gastrogenic diarrhea with

(1) Adolf Schmidt, the examination of the functions of the intestine by means of the test-diet, its application in medical practice and its diagnostic and therapeutic value. 1906. F. A. Davis Co. Philadelphia.

atony and normal acid secretion must be due to the passing over of special putrefactive elements from the stomach into the intestines. In some cases we can find these elements directly in the stomach and in the feces. In cases of insufficient gastric digestion, fermentative and putrefactive elements can easily establish themselves in the stomach, or pass it undestroyed and in this way produce secondary intestinal disturbance as a consequence.

An important point demonstrated by Schmidt is furnished by lientery of the connective tissue. He proved to us in a way which can not be doubted, that in cases of insufficient function of the stomach there is imposed on the intestine increased work which it is not always capable of performing. Raw or smoked connective tissue the intestine cannot digest at all, and if it has once passed the pylorus unchanged, it is carried along as ballast until it is defecated. For muscle, fat and starch it is of no importance whether the stomach digestion is perfect, for here the intestinal juices can compensate. It is the connective tissue which especially becomes dangerous to the intestine. In order to be able to appreciate this fact we need but collect all the connective tissue which appears in the daily amount of the feces of one suffering from stomach trouble. By such experiments it can easily be shown, that under certain circumstances, after a test-diet, the connective tissue of raw meat is quantitatively evacuated, so that it permeates the excrement as a mesh work. As a consequence of this in gastric disturbances not only connective tissue is lost, but also the muscular and fatty tissue enclosed in it. It is normally the function of the gastric juice to prepare meat and fat for disintegration through the dissolution of connective tissue. If this disintegration is absent, the pancreatic juice can only dissolve the surface of these unreduced particles of meat, and as a result pieces of meat and fat are evacuated in the feces.

It is at once apparent that the burden of undigestible substances, as a result of primary gastric disturbance, cannot be a matter of indifference to the intestine. Here the injuries produce an insufficiency of small intestinal digestion either gradual or sudden in its onset. Whether the small intestine functionates properly or not, it cannot digest raw connective tissue and the tissue elements enclosed in it. Consequently the small intestine can no longer comply with the increased demand made on it for a long time, and the result of this is a gastrogenic diarrhea.

INTERESTING PROBLEMS IN EAR, NOSE AND THROAT PRACTICE.

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I. To Heal Persistent Perforations of the Drum-Head.

(Continued from page 583.)

Case IV.—*Both drum-heads extensively lacerated by explosion of nitro-glycerine. Extraordinary reparation.*—E. L. S., thirty-two years of age, while serving as car-inspector, carelessly struck, with his hammer, a small, stray bottle, partly filled, lying upon the track, before him. It was subsequently determined, that the bottle probably contained nitro-glycerine. The explosion that followed the blow of his hammer, knocked him down, and blinded and deafened him. He sustained the following injuries: superficial lacerations of all the fingers of the right hand; contusion of the forehead; several small punctured wounds of the face, and many similar ones of the legs and thighs; injection of both conjunctivae; and laceration of both drum-heads. Nine days after the explosion, these last appeared as follows: one laceration of the right drum-head, horizontally, beneath the umbo, three-sixteenths of an inch long, three-thirty-seconds of an inch broad; two lacerations of the left drum-head—one, extending, from nearly the middle of the bottom of the membrane, upward, behind and close to the handle of the malleus, past the short process, across the membrana flaccida, to the canal roof; the other, from a point above the level of the umbo and behind the other laceration, downwards and backwards, across the postero-inferior quadrant of the drum-head, almost to its edge.

Both ears were treated with antiseptic remedies, at suitable intervals, until discharge from the wounds had ceased; when Blake-paper-discs were applied—in the right ear, just three weeks to a day after the explosion; in the left, three days after the right.

Thirteen days later,—which was about five weeks after the receipt of his injuries,—the patient was dismissed, with normal hearing—a whisper being audible to either ear at thirty-five feet distance; the Blake-paper-discs having been removed; and the wounds of both ears having entirely healed—a remarkable instance of rapid reparation.

CASE V.—*Drum-head ruptured, during sleep, by restless, dreaming bed-fellow.*—Mrs. H., about forty-two years of age, while sleeping, was suddenly aroused, in the middle of the night, by the quick impact of some large body against her left ear. This proved to be the hand of her sleeping husband—a devoted disciple of Isaac Walton—who had recently returned from a fishing trip, and who, now in Dreamland, was strenuously landing what he supposed would prove the biggest "catch" of the season.

She awoke, deafened in this ear, and with a feeling of tension and a ringing noise in it; and her own voice now had an unfamiliar sound to her.

Upcn examination, next day, a perforation, about one-sixteenth of an inch in diameter, was found in the postero-inferior quadrant of the left drum-head, almost at the level of the umbo, or lower extremity of the handle of the malleus, and about one-third its distance from the periphery. This was found in a rather thin portion of the drum-head, and bore no signs of reaction about it.

Strangely enough, the accident had happened to an ear, whose relief from the disabling deafness of "catarrh" had formerly been effected by an operation within the neighboring nares—of which, more, later.

A Blake-paper-disc, three-thirty-seconds of an inch in diameter, was, at once, applied, with instant restoration of normal hearing and natural sound of her own voice.

Eleven days later, the disc was removed from the neighborhood of the original site, the perforation having healed without leaving any mark; and the patient, since then, has not felt the slightest inconvenience from her injury.

CASE VI.—*Perforation of drum-head, with deafness, persistent nearly twenty years: attack of acute inflammation; relief; closure of the perforation.*—F. P. F., forty-eight years of age, applied for relief of symptoms of acute purulent otitis media, of the right side, from which he had suffered for nearly two weeks.

Following an attack of measles, twenty years ago, his right ear had discharged pus for six months; and although, until the two weeks preceding his first visit to me, there had been no recurrence of aural discharge, he had, nevertheless, been afflicted, all these twenty years, with marked deafness and occasional noises in the right ear.

On examination, the right drum-head was found greatly thickened, and perforated at about the line of junction of the postero-superior and postero-inferior quadrants, half way between the umbo and the posterior edge of the membrane. A small nasal polypus was recognized—of which, more, later.

The discharge ceasing, under treatment, within forty-eight hours, four days were allowed to elapse; when, there appearing no probability of its immediate recurrence, a Blake-paper-disc was applied to the perforation.

Three weeks after its application, this disc appeared to be still in its original site. Ten days later, it was soften with normal saline solution, and then carefully removed. The perforation was still open; now, one-thirty-second of an inch in diameter. A stimulant was applied to its edge, which provoked discharge for about twenty-four hours. Two weeks later, a very thin Blake-paper-disc was applied. This was removed after thirteen days; leaving the perforation entirely healed, and his hearing excellent for the voice, whisper, and other ordinary sounds; when he was dismissed.

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PATHOLOGIC PHYSIOLOGY.

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No richer field exists in medicine, in inductive research, or for productive scholarship than the establishing of evident cause and effect in pathologic physiology. Pathologic physiology projects physiology into the field and function of philosophy. Physiology is the most noble of medical studies. Science collects facts while philosophy arranges and predicates laws from them. The field and function of philosophy is to deal with all classes and departments of incomplete knowledge for the purpose of utilizing it for man—to prolong life, lessen suffering, and increase happiness. Pathologic physiology will aid in the partial reduction of medical practice to laboratory investigation, e.g., senility, local and general is heralded by observable cellular change—development differentiation and degeneration of its vital, physiologic process. The cell is accompanied by a cylic series of changes from embryoism through differentiation to senescence termed by Prof. Minot cytomorphosis. (1) The first stage or embryonic cell is peculiar to itself in its physiology, and if prolonged by circumscribed inclusions may become malignantly degenerated in the adult. (2) The second stage of life's cells, that of differentiation consists of two states: (a) cytostatic differentiation or the production of a material of definite and stable composition

as connective tissue, intercellular osseous substance—connective tissue framework; (b) cytodynamic differentiation is the production of substance having a metabolic function—parenchyma. (3) The third stage of life's cell is that of degeneration—senescence. Hence the laboratory investigator may yet discern the cause that determines cellular changes—embryonic, differentiation and degeneration (senescence), i.e., that pathologic physiology of life's cyclic cell and also that of disease. The philosophy of physiology at once suggests that the vital processes of cells—embryologic, differentiative, degenerative—cannot be abolished, however, they can be advantageously modified. The destiny of the cell is an aggregative mould into organs—for physiologic function. The composite organ functionating as a unit make man—the animal.

Physiology or function precedes and dominates structure. Man—the animal—is the drama, the play. It calls into being, function, the stage accoutrements, and dramatic personae which exist and have signification to subserve the drama. The play selects and arranges the scenery, creates and determines the settings, lends coherence and sense to the sentence, furnishes inspiration and purpose to the actors. Now, it may be true in the material presentation of the play that stage furniture is the first structure element manifest, it is subordinate to the motive of the performance or play. The stage material, furniture is forgotten, lost in the functions of the play. Man's body is the stage accoutrements and personae. The drama, the play, is the physiology, the function. Interpreted this means that function determines structure, not structure function. Progressive motion in animals have traumatized, frictionized, the proximal end (brain) enticing increasing blood supply (friction) and consequent increase of substance arises, i.e., bumping one's head against the universe develops the brains. Lincoln's body, that is, his anatomy, his stage accoutrements are dead, however, Lincoln, master of men, his play, his physiology, his function, progresses unabated. John Brown's body, his physical stage accoutrements, is dead, but his function of liberty moves on forever, even to the latest Russian cry for freedom. The staging, the physical accoutrements of Uncle Tom's Cabin have long since disappeared. However, the motive of the play, the function of the drama which was the freeing of the black men was also ceased as the object of the play had been accomplished. The parallel between the field of music and biology or physiology is striking. Pipes and strings are the anatomy of music; but music itself, the ultimate object, is not pipes and strings, it consists of a pleasing succession of agreeable sounds—music is the physiology of the pipes and strings. The pipes and strings—the anatomy—are made to functionate as a unit through physiology which rules anatomy. The several instruments must work in harmony—as a unit—to produce the object which is the orchestra. Sound is itself an element, unrelated, unclassified, having neither predicate nor attribute and cannot therefore be confused with music—which is the pleasing succession of agreeable sounds to the human sense and purposely designated for that object. The only functional value of sound is to be a pleasant succession.

Physiology harmonizes different structures as music does pipes and strings into a functionating unit. As the instruments in the orchestra must subserve the purpose of the musician—which is music—so the aggregative molds of cells—organs—in the body must subserve the dignified purpose of physiology, i.e., functionating unit which dominates, determines and precedes structure. We concede to our materialistic friends the physical basis of life and that function is not purely psychic in character. In the final analysis of structure or function we are dealing with the arrangement of matter, and that is structure. To illustrate that function, physiology dominates structure, anatomy one need only study large non-infected pelvic perineal exudates. Not long after pelvic peritoneal exudate arises blood vessels begin to appear in the mass projecting their course through it, followed by lymph vessels and nerves as well as an endothelial covering until the jelly-like unorganized mass is a living structural unit, a functionating organism In this did not physiology dominate, detremine, percede anatomy —yes, physiology is the central motive power of life. Darwin recognized this principle throughout his investigation of the origin of species. Through physiology he claimed he could modify species by environments that in a few years they could be scarcely recognized. By environmental influences he would modify though physiologic forces the traits or characteristics. Observe how the potent foramen ovale, modifies circulation—i.e., physiology—produce the clubbed fingers. Dr. Thomas G. Atkinson in the editorials of the Medical Standard for July and October, 1906, writes instructively and strikingly on pathologic physiology. He claims that the influences which determine structures operates from the complex to the simple, e.g., the larger functions of the body peristalsis, circulation, cerebration are the simplified specific expressions of the multiple complex impressions produced on the body in general by

circumstances and environment, and these consequently are the determining causes of cellular structure. Physiology is the father of anatomy, of form, of characteristics, of hypertrophy. A myoma in the uterine wall or an ovum on the endometrium are the causes of uterine hypertrophy—increased blood supply has multiplied the cellular elements of the uterus. Physiology or direction of excessive blood to the uterus has determined the multiplication of cellular structure. And thus the amphioxis and similar animals that superseded and repeated his structure bumped their heads against the world's physical forces developing the four skull vertebrae and multiplying their cerebral cells by enticing blood due to the cerebral trauma. The Japanese have long bodies and short legs because they do not use the legs sufficiently to secure blood. Sitting on chairs would entice more blood for large legs. The lessons to be drawn from these views are that structure has no power to modify itself. It is perverted function that alters structure—pathologic physiology is the father of it. Again, Dr. Atkinson claims that perverted function, pathologic physiology operates from the complex to the simple. Pathologic physiology finally terminates by registering itself as altered adjustment of cellular stricture in accordance with the perverted function at issue. Structural changes as a rule are the final responsive reaction of cell arrangement to the pathologic physiology having their origin in the complex relations between organism and environments and operating through the less and less complex physiologic systems of the body. The skillful and scientific physician can discern the origin and course of pathologic physiology and apply the appropriate advice drug or scalpel first to correct the function, and second, to correct the structure.

The chief duty of a physician is to correct function.

As nine-tenths of illness is so-called medical and one tenth so-called surgical, practically the sphere of a physician's influence is limited to the field of pathologic-physiology, which lies between normal physiology and pathologic anatomy—the zone of pathologic physiology.

The common functions of viscera (sensation, peristalsis, absorption, secretion) do not perform uniformly throughout the same visceral tract, and hence demand special attention in physiology, e.g., secretion is more prominent in the proximal end (cerebrum) of the tractus intestinalis, while absorption is more pronounced in the distal end (sympathetic). These views should be borne in mind when observing pathologic physiology. In excessive secretion there is not only an expenditure of energy, but also a loss of material from the body. Physiology deals with the sources of energy and the transformation of energy. The practically wise physician seeks to trace through the deviating functions the source of erroneous energy.

In the consideration of physiology or pathologic physiology the nervous system must be considered a presiding genius, e.g., food within the duodenum incites both the liver and pancreas to secret through a nervous mechanism, for it appears that if bile and pancreatic juice become mixed in Vater's diverticulum or immediately on arrival within the duodenum the power of the succus pancreaticus is doubled. It is well to know for practical therapeutics (pathologic physiology) that adrenalin—a product of the adrenal medulla circulating in the blood appears necessary for the excitation of any nervus vasomotoris. The thyroid gland manufactures some substances—thyroiodin—which aids in the proper growth of body tissues, and also for the normal discharge of the cerebral functions. The fetus during gestation secretes some substance which aids in enlarging the mammary gland. The ovary secretes a substance which preserves sex and nervous characteristics. Hence with increasing knowledge of physiology we may be able to isolate these substances—adrenalin, thyroiodin, ovarian secretion, secretions of pregnancy which induces mammary hypertrophy, etc.—and with their isolation possess a list of therapeutic messengers at our command which will correct the pathologic physiology of bodily organs. With broader knowledge of physiology present therapeutic nihilism will be replaced by rational therapeutics which rests on physiology, the solid ground of nature.

The results from the study of the four grand common functions of viscera (sensation, peristalsis, absorption, secretion) must be the rock and base of our authority in pathologic physiology.

RABIES PREVALENT.—Babylon, Long Island, has been considerably alarmed over the prevalence of rabies among the dogs in that section. The board of health convened in special session and passed stringent resolutions requiring all dogs owners to keep their dogs under close watch; unless this order is obeyed the dogs will be shot. In New York City also the unusually large number of cases continues, 30 cases having been treated within a month. Cures have been effected in all cases that have been treated.

TALKS TO RECENT GRADUATES.

A. L. BENEDICT, M. D.

BUFFALO.

IV.—LITTLE PROBLEMS OF PROFESSIONAL LIFE.

PROBABLY the first question that confronts the young physician, after he has left the hospital, is the choice of location. The young man without capital naturally thinks of a salaried position. Very few such are available, at least at the very outset. Older physicians occasionally employ assistants, but the supply is so far ahead of the demand that it is almost never that anything like an adequate salary is paid. Five or six dollars a week is the usual wage, or merely privileges of the use of office and instruments, in some cases. Not rarely, the assistant pays his employer.

The ratio of physicians to population in the United States, is about the same as that of white to red blood corpuscles, 1:600. Unless there are peculiar circumstances it is well to consult directories regarding this point. It is also well to remember that almost the only opportunity to enter at once into a self-supporting practice, is found in the country or in some factory district of a city.

Unless there are peculiar circumstances, it does not appear that previous acquaintance either hinders or helps a physician, although there is a general tendency for a man in any line of activity to maintain about the level of his family. If he rises above or falls beneath this level, it is on account of personal strength or weakness.

A similar principle is that, generally speaking, it is wise to remain in the climate and social or political area to which one is accustomed. Unless there is some physical reason to the contrary, most men enjoy better health in the climate to which they are enured, and in going from city to country, or from South to North, or vice versa, considerable readjustment of views and habits is required and before this has taken place, unintentional but serious errors may be committed.

Having chosen the geographic location, there remains the choice of a residence, which is governed largely by individual tastes and means. Without regard to immediate necessity, that is supposing that the young physician has enough capital to last three or four years, by which time he should be earning a fair income, there is a difference of opinion as to whether it is best to seek a neighborhod comparatively free from competition, so as to build up a rather large practice in a few years, or whether it is best to locate among established physicians and in a part of the city which can be regarded as a satisfactory permanent residence. Each method has its advantages and its disadvantages; some fail and some succeed by either method Even in comparing ultimate degrees of success, it is difficult to determine how much is due to the method and how much to personal factors.

In some cities the question soon arises whether the young physician should seek a career as a teacher. Twenty or thirty years ago, teaching positions involved comparatively little labor, yielded fair direct returns and were almost a prerequisite to a consulting practice. Thus, ambitious men who could not get into existing schools, often organized competing schools. It would require too much space to trace the various evils and counter-evils that developed, and to relate the history of the reaction from the educational system of that time. Today, medical teaching is becoming more and more a specialty, and while the gratification of the very highest ambition in medicine still demands a teaching position, it demands one of the proper kind and even longitude enters into the matter to a considerable degree. Positions that develop Peppers and Oslers are few and are practically out of reach of the vast majority, even of the best physicians. Excepting positions of honor in really great universities, it is doubtful whether, at present, medical teaching is of service in advancing a man in his strictly professional work and the tendency is more and more toward the choice of teachers for didactic ability and toward the restriction of teachers to teaching as a profession apart from practice. At any rate, it is no longer wise and, indeed, scarcely possible, to organize a medical school as an advertisment, or to accept a position on a faculty, except for the immediate benefit derived.

Somewhat the same thing might be said regarding hospitals and dispensaries, though not in the same degree. Whereas appointments to the latter were at one time nearly restricted to medical teachers this is no longer the case unless in a few cities. The profession recognizes a distinction between teaching the rudiments of medicine to undergraduate students and the devotion of time to advanced problems in medicine, which virtually constitute a faculty of teachers of the profession. Hospital and dispensary work is in many ways a decided help to the worker and yet even men who hold such positions are rather returning to the method of a couple of generations ago,

when the physician made his reputation both in attainments and in specious appearances by his attention to private practice. Excepting special lines of medical research, notably, insanity, deaf-mutism, etc., and problems in which a rapid examination of a large number of cases is desired the greater intelligence, command of facilities and average longer period of observation of private patients render them superior material for medical study. Then, too, in an economic sense, including not only the narrow financial welfare of the profession, but that of the community at large, clinical study, has its greatest value as applied to a higher stratum of society than usually seeks dispensaries and hospital wards.

A general principle that applies to didactic and hospital and dispensary positions as well as to nearly every other "side line" in medicine, is that, unless they pay for the time directly or in opportunities for genuine study, they are not worth while. Certainly, if obtained by political machinations or held by men who act the part of the dog in the manger or if their duties are not performed sincerely and in good faith, they do not pay, even in a commercial sense.

Numerous minor problems will arise with regard to office cards, signs, prescription blanks, conduct of the office, etc. In various ways, the young physician will be tempted to stretch a point in order to attract attention to himself, for instance, by using a scholastic degree on his card or sign, by plastering his door and windows, or even adjoining lamp posts with signs, by printing his name in some fancy way, by distributing reprints to the laity, and by various other dodgers which he intends to keep within the limit of ethical regulations. When tempted in such ways, it should be remembered that it is risky to drive too near the edge of a precipice. The only safe rule is to follow local customs (if you please, etiquette), and to avoid anything which will advertise, not so much the doctor, as the fact that he is trying to make himself conspicuous. For instance, it was unwise in a doctor, known to his friends as "Phil." to have his sign read "Dr. P. Moore Wetmore," and in another to announce his specialty as "The Jack Asthmatic Institute." A national society dealing largely with ethical matters, once rejected a candidate for office because his card was filled with notices of his numerous life insurance and railroad appointments.

The question of activity in medical, scientific, political and social organizations early and repeatedly comes before the physician. Many physicians do fairly good work and achieve financial success without identifying themselves with their profession yet, as a general rule, every physician owes it to himself and his patients to derive the benefits of the experience and study of others and, in turn, he owes to his profession the very modest financial and the moral support of affiliating with his fellows and imparting such original observations as he may make. Under present conditions, he should at least join the formal, county or euqivalent component of the state and national association, and should be guided by special interests, amount of leisure and other circumstances, as to other membership. Regarding other societies, it is well tc choose according to personal ability and tastes. There is a prevalent and justifiable prejudice against active political work by a phyiscian, certainly if undertaken from interested motives. On the other hand, there is every reason why a doctor should be known as a good citizen. The writer's experience has been that the acquaintance made in various scientific, literary and social organizations, will at least pay the actual expense of membership. At the same time, one should avoid wasting too much time in such ways. The golden mean is to follow genuine inclinations, to join only such organizations as one can use to good advantage, and in which he can be useful to others.

Accidents of the Foot-Ball Season.—The 1906 foot-ball season ended with the games of November 30th statistics have been tabulated of accidents of the game up to and including November 24, which tell of 14 deaths and more than a hundred players seriously injure, a marked decrease from the record of last year, when 18 players were killed and 159 seriously injured. In the record of dead and injured in this year's games the most significant feature is the decrease in the casualties among high school players. In the season of 1905 11 high school players were killed and 47 were injured. This year seven received injuries which resulted in death and 25 were badly hurt. All the college and high school games this year were played under the new rules drawn up after the close of last season to satisfy the agitation for less dangerous football aroused by the startling record of casualities in the season of 1905. In that year and the preceding years the brunt of the casualities was borne by high school players. It was realized that football as it was played was too dangerous a game for the average immature school player and the new rules were designed to eliminate as far as possible the brutality and roughness under the old rules.

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OFFICIAL TRANSACTIONS.

A CASE OF HYSTERIA IN THE MALE.

PETER J. WEBER, M. D., PH. G.

ST. LOUIS.

THE subject of this paper, a blacksmith, afflicted with tertian malaria and hysteria.

Name, Wm. H. S.; age 31; color, white; sex, male; birth, October 3, 1875; nativity, Kentucky; occupation, blacksmith.

Habit.—Drinks beer and whisky moderately. Uses tobacco to excess in chewing and smoking. No drugs. Sexual habits frugal. Regular hours for eating, sleeping, etc.

Family history good. No history of rheumatism, consumption, cancer or nervous disorders.

Personal History.—Measles, mumps, chicken-pox. Congenital double inguinal hernia. Malaria eight years ago. Gonorrhea four years ago; good recovery. Sore on his penis sixteen years ago, pronounced leutic by his father, a practitioner of medicine. Pain in bones, especially at night, otherwise no secondary symptoms. Treatment for one week. In 1897 had an attack of acute articular rheumatic fever; off and on attacks for several years. November 20, 1900, fell from telegraph pole, thirty-five feet, fracturing right ankle; one year later joint resected. 1901, double successful radical herniotomy performed. 1902, hemorrhoids removed surgically.

Present Trouble.—Last Tuesday afternoon felt very hot, headache, sick at stomach, tired and depressed feeling; difficulty in breathing. Fever continued Wednesday, Thursday about 3 p.m. developed severe chill followed by high fever and sweat. Friday high fever, headache, anorexia malaise, nausea and constipation, then entered hospital.

Physical Examination.—Fairly well developed, muscular and nourished white man. Height 5 feet 10 inches; weight 160 pounds. Dark sallow complexion. Right ankle stiff and ankylosed. Projection right clavicle from former fracture. No glandular enlargement or skin eruption. Marked herpial eruption about the mouth.

Digestive Tract.—Tongue moist, white coat, pale, slight tremor. Teeth, gums and pharynx in good condition. Poor appetite, digestion impaired; complained of food lying in his stomach for hours with a great deal of distress. Bowels always costive. Herpes surround entire lips. Spleen enlarged and palpable. Abdomen soft and lax, sinking lower margin of sternum. Xiphoid cartilage at edge very soft, movable and flexible. Transverse colon distended with fecal material, some tenderness over it and in the region of gall bladder. Liver dullness normal.

Respiratory Tract.—Well developed chest, good equal expansion and excursions, normal fremitus. Percussion and auscultation negative. Voice clear; no dyspnea, cough or expectoration.

Circulatory Apparatus.—Apex beat normal position, heart sounds good and clear. Pulse good volume and tension, anteries soft and full. Skin and mucous membrane very anemic.

Urinary Apparatus.—At times passed his urine once in twenty-four hours, sometimes once in two days large quantity. Difficulty in starting stream; number of times compelled to stand up in order to urinate.

Urine analysis, negative.

Nervous System.—Sensorium clear, pupillary reflex good, slight Rombergian; knee jerk diminished. No ankle clonus Babinski on right foot. Cornea and sclera anesthetic on both sides. Visual field narrowed. Anesthetic areas both forearms and chest. Complains of shaking sensation in throat as a ball. Laryngoscopic examination revealed nothing. Complains of frequent pain in region of occiput. Restless nervous individual. Dull facial expression.

Blood Examination. — Tertian malarial plasmodium.

Diagnosis.— Tertian malarial fever, hysteria.

Prognosis.—Good for malaria. Treatment. —Quinine, arsenic and valerian; dietetic and eliminative.

DISCUSSION.

Dr. W. H. Luedde.—In regard to the narrowing of the visual field, we must look upon

this symptom in the same way as we consider the anesthesias in other parts of the body. It is an anesthesia of the retina, as it were. An ingenious method to detect simulation or exaggeration on the part of the patient is the so-called "Eck-Kampimeter." After the usual method of examining the visual field, the patient is placed at a certain distance from and facing a corner. The two side walls are marked off in tangents of degrees. The patient is confused by his new position, and thus any large errors in the field taken in the ordinary way can be shown up. Discussion will not explain the corneal anesthesia. It is as real as any of the symptoms of this disease, and certainly very marked in this case.

Dr. Hoge.—These anesthesias are of course of a hysterical character and apparently developed at the same time in consequence of the malarial attack, just as any existing influence might bring out the hysterical symptoms in a patient predisposed to them. This patient, it seems, has had such symptoms before.

Dr. Campbell.—This is of course a case of hysteria. I would like to call attention to the definite value of a sign very frequently, but not invariably present in hysteria, which we find in this patient. I refer to anesthesia, not of the sclera, but of the cornea. In testing your patient touch the cornea with a piece of paper or a clean tooth-pick held lightly in the hand, so as to leave the epithelium uninjured. If the patient does not wink the eye one may exclude the idea of simulation on his part. The corneal reflex is never under the control of the will, and is never absent except in hysteria, or in certain affections of cranial nerves, which if present, make themselves manifest by obvious signs and symptoms.

Dr. Weber, in closing.—What led me to suspect hysteria was that he complained one morning of a ball sensation in his throat and we could find nothing to account for it. Then we found the anesthesia of the eyeball and the anesthetic area on the arm and the other conditions brought to your attention. Whether malaria has any tendency to produce these conditions I am unable to say.

Dr. Campbell.—In a hysterical individual, anything that would put him below par would be likely to produce the attack. Any other fever would be as apt to produce an attack.

In seeking the source of an obscure sepsis, do not overlook an examination of the ischiorectal region.

A CASE OF FRIEDREICH'S ATAXIA.

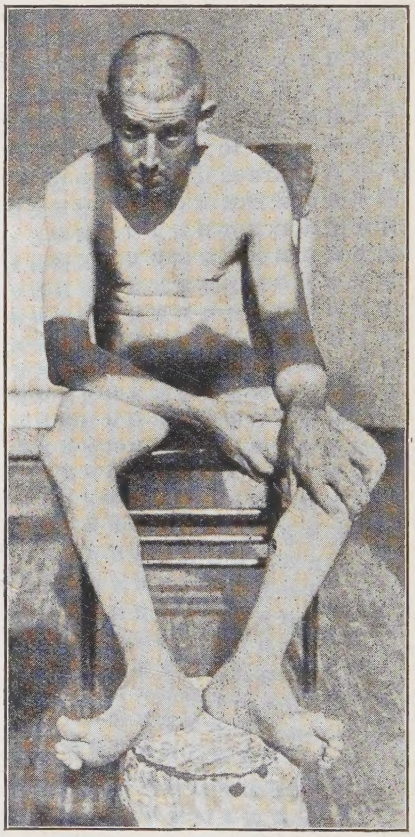
PETER J. WEBER, M. D., PH. G.

ST. LOUIS.

I wish to present a case of Friedreich's ataxia without a family history, but simply a neurotic family taint.

Name G. C.; age 32; male; color white. Social condition single. Birth, 1874, March 31. Nativity Kentucky. Occupation farmer.

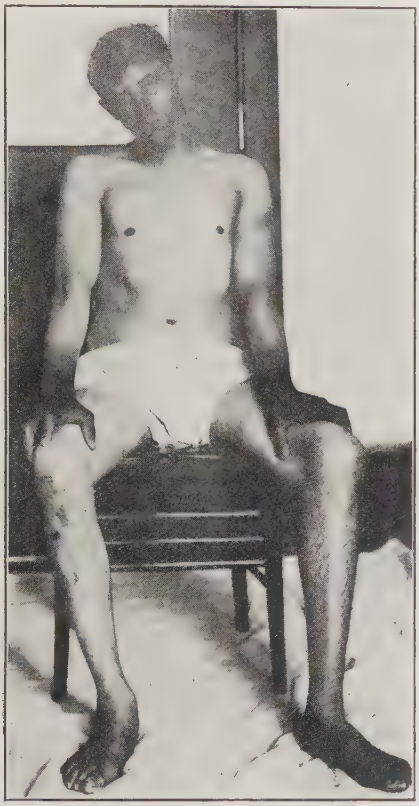
Habits.—Worked as a farm hand until twenty years old; past twelve years has worked at odd jobs, occasionally begged. Uses whisky moderately, beer when he can get it. Temperate smoker of tobacco; chews to excess.



Family History.—Father living in good health; mother died of cranial trouble at 47 years. Grandfather died of paralysis. One brother and sister living in good health.

Personal History.— Measles, chicken-pox and smallpox. Went to school for five years, can read and write. Says he was always clumsy in walking and running, he would often fall and stumble. His mother thought it was due to his large boots. At 18 years of age, fell from a wagon injuring his left

knee; one month later developed what his doctor called white swelling; it was painful, tender, red and swollen. Joint aspirated, poultice applied which removed a great deal of pus. Then confined to bed for six months, first three months remained unconscious; gradually regained his senses, found himself in a paralyzed condition, noticed curve in his



back, unable to move about. Patient unable to give clear history as to is temperature, etc. Denies all venereal diseases. Upon leaving bed he discovered he could not walk without aid of crutches; short period later could walk short distance without them. Then became more and more helpless, until finally crutches became useless, required invalid's chair.

Physical Examination.— Well nourished muscular white man; dark complexion, black hair, brown eyes, scleras clear. Facial expression dull. No skin eruption or glandular enlargement. Left knee shows old scars and striae former aspiration. Both feet show condition talipes equinus valgus and tendency for the great toe to turn upwards. Marked curvature of spine (kyphosis) and scoliosis to the right in dorsal region.

Digestive Tract.— Tongue clean, moist, teeth, gums and pharynx in good condition. Appetite and digestion good. Bowels regular. Abdomen sunken, soft and lax; spleen not palpable. Liver dullness normal.

Respiratory Tract.—Well developed unsymmetrical chest, considerable deformity. Muscles, shoulder girdle, hypertrophied, while those lower down are atrophied, especially those of the back. Vocal and tactile fremitus normal. Percussion, normal pulmonary resonance. Auscultation, normal respiratory movement, abdominal breathing, good marginal expansion and excursion. No cough, dyspnea or expectoration.

Circulatory Apparatus.—Apex beat normal position, cardiac area normal, heart sounds good and clear. Pulse 76, good volume and tension. Arteries and veins soft. Skin and mucous membrane slightly anemic.

Urinary Apparatus.—No symptoms, good control of bladder and rectum. Urine analy-

sis: Color amber; reaction acid, specific gravity 1025; transparency clear; no albumen; no sugar; no casts.

Nervous System.— Sensorium apparently clear, intelligence fair, speech slow and scanning. Pupils react to light and accommodation. No nystagmus noticed when the eyes look directly ahead, but when directed upwards and outwards lateral nystagmus ap-

pears. Vision good, normal color perception; no facial paralysis. Tongue has no tremor, projects in the median line. No paraesthesia, can recognize sharp from dull all over body and face. Hand grasp very strong on both sides. No intentional tremor, can raise cup full of fluid to his mouth without spilling a drop. Handwriting free from tremors. Marked ataxia of arms when eyes are closed, unable to touch his nose with index finger. Shoulder girdle muscles markedly hypertrophied, with his arms he can raise himself from bed into an invalid's chair, vice versa. Unable to support his trunk without artificial support or his arms. Both knee jerks lost. Ankle jerks lost. No ankle clonus. Abdominal and cremasteric reflexes present. Static ataxia present, oscillating movement of head and body. Voluntary actions are overdone, when picking up things. Claw-like grasp in both hands. Big toe flexed dorsally on first phalanx. Choreiform movements present. Powerful extension of both legs while flexors are very weak. In walking requires some one to support him; throws his legs out as a tabetic; strikes the floor with tips of toes with great force, resulting in pain and injury. Well behaved, good cheerful disposition; makes no complaint, spends time reading newspapers and magazines.

Diagnosis.—Freidreich's ataxia.

Prognosis.—Unfavorable.

Treatment. — Arsenic, dietetic, symptomatic. No improvement under increasing doses of Fowler's solution up to ten minims three times daily for one month, then reduced to five minims thrice daily.

I am indebted to my colleague, Dr. Neer, for valuable help in the preparation of this paper; Mr. Belton for photograhs with Dr. Kirschner's kind permission.

DISCUSSION.

Dr. Given Campbell.—We are all glad to see this case. It is quite typical of its kind. Of course those cases often run in families, but apparently his own is the only case this patient knows of among his relations. The visual and eye-muscle defect is a little unusual. The nystagmus, of course, is what we would expect, but the atrophy is a little more than we usually see it.

Dr. M. W. Hoge.—The history is very full and complete, the case has certainly been well examined. The diagnosis, of course, cannot be questioned. The history in this case in one point corresponds with the history brought out in numerous others; the development of the condition occurring after an infectious disease. This patient has had measles, smallpox and chicken-pox, the toxemia apparently hastening the degenerative process. But there is a congenital defect in these cases to begin with. It is not limited to the columns of Gall and Burdach, but extends to the pyramidal tract and the anterior horn cells. The prognosis is altogether unfavorable. That does not make it any the less incumbent upon the physician to make a correct diagnosis, because while your prognosis can only be unfavorable, if you can tell your patient what the trouble is you can save him expense in the way of further attempts at treatment.

Dr. F. B. Hall.—The very fact of the extensive degeneration in the nervous system without hope of repair, would make it seem useless to attempt any correction of deformities. I am very much interested in the case, not having had the opportunity of observing such a case so closely before.

Dr. Weber, in closing.—In such a case it is not necessary to have the family history as long as you have the neurotic history. In multiple spinal sclerosis, for which this condition might be mistaken, you have an infectious history. One point of importance is the flexors are much weaker than the extensors.

Dr. Campbell.—Has any one related to him had similar trouble?

Dr. Weber.—His mother died of cranial trouble and his grandfather had some nervous trouble.

Dr. Campbell.—Would not tenotomy enable him to get around better?

Dr. Hall.—It would be a very simple procedure and would seem worthy a trial, as it might add to the patient's comfort.

(In reply to Dr. Campbell's question in re tenotomy.)

IDAHO WILL HAVE HEALTH LAWS.—Idaho is unique among the states in having no laws against the spread of contagious diseases, no quarantine regulations, no laws for the registration of births and deaths. It is said efforts to pass such laws have been repeatedly defeated in the legislature by the Mormons who have feared that thereby the registration of births might become necessary, thus exposing their polygamous marriages. This year the political parties are pledged to the enactment of health and vital statistics laws in such a manner that it is believed the Mormons will be unable to defeat them and the state will be relieved from its present anomalous condition in these respects.

THE MEDICAL FORTNIGHTLY

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EDITORIAL

Impractical Medicine.

As a general proposition it is the physician's duty to consider practicability in all his dealings with his clientele and his failure to do so often results disastrously. Nowhere is discretion more needed than in prescribing remedial measures other than medicines, people want to be told what they must do to get well in the surroundings where they are living and are forced to continue to live, and with the means at their command, it is their right to receive the best instruction applicable to the circumstances. To advise a couple of months at the seashore to a mother of several small children, in the family of a wage earner who has no income save his wage, is little short of cruel; to advise a man with a total income of sixty dollars *a month* and a family to support, to ride horseback a couple of hours each day, when you must know that he couldn't hire the horse for less than his entire income in St. Louis, is preposterous. Yet we keep hearing of just such impractical advice being given patients by physicians who should know better. The vast majority of the people whom we meet have to study ways and means, they have no endless leisure and no inexhaustible bank account, and the remedial means must be fitted to their situation. It was recently my privilege to hear the parents of a ten-year-old girl discussing the treatment advised by a physician, five years out of college, for the child who was suffering with a mild attack of chorea, The father stated that following this advice meant the breaking up of his family for a year, the exiling of the mother and child, leaving him to care for the three other children as best he could, and the devoting of his entire income to the two absentees; he never did it, he got another doctor. Spas are all right when we must have them, so is the country, and so are the mountains and the seashore, but everybody cannot avail himself of these therapeutic adjuvants, and people want to get well at home; they MUST do so, and if they cannot be told the way to health by you they will eventually go elsewhere, and their leaving you will have done you no good!

Happily in the case of at least one disease treatment at home and under normal surroundings is having proper attention; we refer to pulmonary tuberculosis. There can no longer be question as to the efficacy of rationally conducted home treatment, and with this treatment has come hope to the many who found it impossible to seek more favored conditions. If you have a very wealthy clientele you may find it possible to send your patients North in the summer and South in the winter, you may use the maseuse frequently, and your patients may be singing your praises at the various spas; but if you are meeting the people most of us meet you will preach open windows, proper clothing and food, sensible exercise and a host of other things which are at every man's command, and may be used without causing financial distress to the patient and his family. The man who will discover and apply these things will live in the love of his patients.

The Female Hospital.

THE motives prompting argument for making of the Female Hospital a department of the City Hospital have been questioned in the present discussion o fthe subject, and make further comment justifiable. The institution is situated in one of the remote parts of the city, far from the offices of the Health Department, the City Dispensary and from the City Hospital with which institutions it is closely identified, its distance from the dispensary is especially to its disadvantage; the hospital building has reached an age of apologetic usefulness, and it is not at all suited to modern hospital demands. Presently this building must be razed and another erected in its place; wisdom would point to the erection of the new building as a pavilion of the City Hospital group. We believe that this union would present nothing but advantages over the continued independent conduct of the hospital, and the strongest argument in favor of the change is the fact that those officially interested in the institution express themselves as considering the change

a desideratum. There may be legal tangles to be straightened out before this can be effected, there doubtless are, but the move is in the line of progress, and it is going to be.

The Female Hospital is the second hospital in point of importance conducted by the city, in spite of the fact of being housed in a building which has outlived its best usefulness; the work being done there is of a class and volume which is splendid; the old building holds an up-to-date hospital. Its present conduct is scientifically effective, but its usefulness would be increased were the institution housed in a modern pavilion and were the patients delivered to it with less of an ambulance ride as will be the case after the union is effected. The pleasure of service will then be tremendously increased.

We do not believe that any of our institutions will ever be able to do effective work with any smaller medical and nursing forces than they now have, and any argument claiming economy as a result of union must refer to the retinue of help which will doubtless be considerably decreased when the institutions are conducted as a single menage.

In France there were eleven hundred less medical students in 1906 than there were in 1895, not counting foreign students whose numbers had diminished 46.8 per cent; that is, from 1137 in 1895 to 604 in 1906. In the United States there was a decrease in 1906 of about 25 per cent.

Hunting Fatalities for the 1906 Season—Press reports give the following statistics of casualties of the hunting season in all the states of the fall season, 74 killed and 70 wounded. Northern Michigan and Wisconsin, where the open season for deer closed November 30, went ahead of the record for last year in deaths, 28 being reported this season, against 26 for the previous one, but in the number of persons injured this year's record falls far below that of the previous one, having only 20 serious accidents which did not result in death. The larger part of the deaths were the result of accidental discharges of shot-guns, many of them occurring while the owners were cleaning the weapons. Statistics for New England to midnight of November 30, when the close season on moose went into effect, show that 19 human lives were lost in the woods. Of these eight fatalities occurred in Maine, six in Massachusetts, six in New Hampshire, and two in Vermont. Of the above total 13 were directly the result of accidents causing the death of the victims being mistaken for game.

THE REVIEWER'S TABLE

Books, Reprints, and Instruments for this department, should be sent to the Managing Editor, Century Building, St. Louis

THE DISEASES OF INFANCY AND CHILDHOOD.—Designed for the Use of Students and Practitioners of Medicine. By Henry Koplik, M. D., Attending Physician to the Mount Sinai Hospital; formerly Attending Physician to the Good Samaritan Dispensary, New York; Ex-President of the American Pediatric Society; member of the Association of American Physicians; and of the Academy of Medicine. Second edition, thoroughly revised and enlarged. New York and Philadelphia: Lea Brothers & Co.,1906. (Cloth, $5.00 net; Leather, $6.00 net.)

In its first edition this work has established for itself a firm place in the esteem and confidence of the profession, and the mere announcement of a revised, and somewhat enlarged edition must needs excite pleasurable anticipation. In revising Dr. Koplik has entirely rewritten some sections of the book, and has made changes wherever it has seemed that change would increase its usefulness. He has made some considerable additions to the text. There has been no radical change in his general presentation of the subject. The profession is at this time especially interested in anything relating to infant feeding, and it is a definite pleasure to note the careful attention and the clear presentation he has given the subject. His discussion of the treatment of diseases of the new-born is also an especially interesting department of the work.

Dr. Koplik is one of America's best teachers and his clinical instruction is all that is practical, the book shows the characteristics of just such a teacher and will prove beyond all else to be practical.

PROGRESSIVE MEDICINE.—A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica, Jefferson Medical College, assisted by H. R. M. Landis, M.D. Volume 3, September,1906 Philadelphia and New York: Lea Brothers & Company, Publishers. (Paper, $6.00 per year; Cloth, $9.00 per year.)

Each number of this valuable publication impresses us anew with its worth; few physicians are in a position to take so many medical journals as will keep them informed of general medical progress, and it is for those who are not subscribers to a long list of journals that Progressive Medicine is published.

This number is one of especial interest. The disease of the thorax and its viscera, including the heart, lungs and blood-vessels, are thoroughly covered by William Ewart, M.D., F.R.C.P.

William S. Gottheil, M. D., takes up Dermatology and Syphilis, to which he devotes eighty-two pages. The spirocheta pallida, or treponema pallida, is reviewed and a very good micro-photograph given. He recommends most highly hypodermic medication with the salicylate of mercury in the treat-

ment of syphilis and describes the technique of making the injections.

Nearly one hundred pages are devoted to Obstetrics by Richard C. Norris, M.D.

This volume is concluded by William G. Spiller, M.D., upon the Nervous System. He urges that gumma is not the most common lesion of cerebral syphilis.

THE NEW THERAPEUTIC GAZETTE.—The publishers announce that after January 1st next the Therapeutic Gazette, Medical Age and Medicine will be incorporated in one journal, which will be known as The Therapeutic Gazette, and will be edited by Drs. Hobart A. Hare and Edward Martin. The excellent practical qualities which have made each of the three journals among the foremost of American medical publications will be continued in the greater Therapeutic Gazette. While we may regret the discontinuance of the Age and Medicine deeply, we will expect the Gazette to more than make up to us for what we have lost.

GOVERNMENT MODEL FARMS.—James J. Hill, president of the Great Northern Railway, believes that model farms should be established in every agricultural county of the United States, under control of the several state governments, or of the national government, or of the two conjointly. Such farms, he argues, would radiate intelligence, activity, and reform in tillage, with the possibility of doubling the farm product of the country. The December Century will publish Mr. Hill's discussion of these "Government Model Farms" and his plea for their establishment. "Might it not be worth while," he argues, "to expend the sum that such a system would cost, even though it should be necessary to postpone for another year the building of a battleship or a couple of cruisers." A significant declaration by Mr. Hill is that such a scheme should be kept out of the clutches of the spoils system.

THE WISE MAN.—Once upon a time there was a poor, overworked Muck Raker who had become tired of his job. He was ambitious, and felt that his efforts were not appreciated. He had a long nose and wore magnifying glasses. One day while raking assiduously he was accosted by a stranger whose aspect was even worse than his own. This man was a Herald of Light. His mission was to seek out sweetness and virtue in a naughty world, and he was admirably equipped with a dark-lantern without any oil, and wore spectacles with smoked lenses. "What are virtue and honesty?" inquired the Muck Raker. "I can't tell you," answered his companion sadly. "I have never seen any." While thus conversing, they were joined by a wise man who proved to be real reformer disguised as an oculist, and who, perceiving their error, presuaded them to exchange glasses. The remedy was simple but effectual. The Muck Raker is now working union hours and is happy and contented, while the other has already made some most astonishing discoveries. Moral: A small ray of sunshine, if welcomed and encouraged, will often destroy an army of offending microbes.—December Lippincott's.

THE ABSURDITY OF FRETTING.—There is one absurdity which it seems to us is everywhere and by everybody underestimated, and too much overlooked in valuation of character. It is the absurdity of fretting. It is common as air, as speech—so common that unless it rises above its usual monotone, we do not even observe it. Watch any ordinary coming together of people, and see how many minutes it will be before somebody frets—that is, makes more or less complaining statements of something or other, which probably every one in the room, or in the train, or at the street corner, it may be, knew before, and probably nobody can help. Why say anything about it? It is cold, it is hot, it is dry, somebody has broken an appointment, ill-cooked a meal; stupidity or bad faith somewhere has resulted in discomfort. There are plenty of things to fret about.—Health.

THE HEALTH OF THE AMERICANS IN THE CANAL ZONE.—According to the report of the Department of Health of the Isthmian Canal Commission for the month of September, 1906, seven white men out of a total of 5,000 died, two of disease and five from violence. Both of the white men died of pneumonia; one was a Greek and the other a Jamaican, and both had been on the Isthmus for eight months. There are about 4,800 Americans on the Isthmus, and Dr. Gorgas says: "I think it is worthy of remark that 5,000 Americans recently from a temperate zone should have been able to pass two months during the height of the rainy season, their work extending forty miles through a tropical jungle, without a single death from disease of any kind. The figures with regard to employees are absolute. We get the actual number of employees from our pay rolls, and the deaths from the hospital reports and the cemetery reports." There are about 1,000 women and children, wives and families of the American employees on the Isthmus, and none of these died of disease during August and September.

The Hospitals of New St. Louis

THE ALEXIAN BROTHERS' HOSPITAL.

THE ALEXIAN BROTHERS' HOSPITAL was founded in 1869, the erection of its building was begun early in 1870 on ground acquired at 3933 South Broadway, and the beautiful structure was completed in 1900. The cost of the ground and building has been about $250,000. The building contains 250 beds, and the institution cares for about 1900 patients each year, of whom fully one-sixth are charity cases. The institution is conducted by the Alexian Brotherhood of the Roman Catholic Church. A training school for nurses, which is open only for members of the brotherhood, is an important feature of the work of the institution. The medical staff includes the following physicians: Frank J. Lutz, J. P. Hennerich, Ernst Mueller, D. F. Hochdoerfer, Hy. Muetze, and L. R. Padberg.

DR Y. E. COLVILLE, of Chattanooga, Tenn., has become half owner and editor of the Oklahoma Medical News-Journal; he will hereafter have complete editorial control of the journal, Dr Phelan devoting his attention to its business management. The journal is keeping pace with the rapid progress of Oklahoma; its field of usefulness is constantly widening and its management is fully awake to the situation.

NEW MEMBERS OF THE ST. LOUIS MEDICAL SOCIETY—During November the following were elected to membership in the St. Louis Medical Society: R. Lilburn Byrd, 1000 Bitner; Theo. F. Fienup, 3218 Lafayette; Carl J. Koontz, 4551 Delmar; J. W. Marchildon, 2254 S. Vandeventer; George M. Park, 5744 Cates; Edward Schulz, 3869 Cottage; Selden Spencer, 2723 Washington; Benjamin G. Benson, 2136 Benton; W. Antoine Hall, 1556 Tower Grove; Frederick C. Simon, 1835 Cass; Nathan N. Yahlem, 1816 Franklin; Guthrie McConnell, 4421 Berlin; Charles S. Rehfeldt, 2255 S. Jefferson; Walter B. Yost, 1119 Union.

"I give you this, you understand, as hush money," the Senator whispered.

And, handing the druggist a quarter, he took up the bottle of soothing syrup and tiptoed out.

A primary tumor of the lateral abdominal region in infants and young children is usually a sarcoma of the kidney.

REPORTS ON PROGRESS

Comprising the Regular Contributions of the Fortnightly Department Staff.

INTERNAL MEDICINE.

O. E. LADEMANN, M. D.

The Value of a Study of the Apical Outline in the Diagnosis of Incipient Pulmonary Tuberculosis.—Minor's (Am. Jour. Med. Sci., Oct., 1906) paper presents his impressions of the diagnostic value of outlining the apices of the lung in pulmonary tuberculosis, based on the marking of such outlines for the past six or more years in all cases. He proposes the term "apical outline" in preference to the designation "Kroenig's sign," as being more applicable and is self-explanatory. The pathological fact on which the value of this diagnostic method depends is the well-known tendency to shrinkage of the apex of the lung when a tuberculous process develops in it—not alone from fibroid formation with consequent contraction, but even before such fibrosis occurs, through lessened function in the apex. The technique requires great accuracy. It is best to use the little finger as a plessimeter; the percussion stroke needs to be very carefully and correctly made, the most vertical elastic stroke possible, generally very lightly made, alone giving accurate results. The patient should sit erect or stand directly facing or backing the examiner, according to marking of either anterior or posterior outlines. The head is to be held exactly in an anteroposterior plane in order to have muscular tension on both sides of the neck equal. Percussion for the inner anterior line should start well up the side of the neck, above the lung, and come slowly downward until pulmonary resonance is found, when the inner border of the plessimeter finger should be indicated by a dot of the blue pencil. Repeating this from behind forward we get a series of dots, which we unite with a line. The outer border should be approached from the shoulder and marked off in the same manner. In percussing out the posterior lines it is advisable not to have the upper ends of the anterior lines visible, as if they are it will inevitably affect our judgment, while the fact that the upper end of the posterior outline coincides accurately at the trapezius bilaterally with the anterior line, when run independently, adds to our assurance of the correctness of our results. The author found that in early tuberculosis, especially of the apex, but also of the lower portion of the lung, careful percussion will generally demonstrate a dislocation of the inner line outward, and that the inner line, both anteriorly and posteriorly, is likely to be the earliest affected. The posterior inner line changes chiefly or only in its upper two-thirds. The dislocation inward of the outer border generally occurs later, and a change of both inner and outer lines is naturally less common than of the inner or outer alone. In early cases the lines do not approximate at the top, but join their fellows from the rear; in old cases with marked fibroid shrinkage they often run together to an apex before they reach the trapezius border. Minor found the diagnostic value of these outlines in earlier cases and to some extent their prognostic value later, to be considerable, not, of course, when taken alone, for no sign unsupported by others has great value; but combination with others, such as dislocation occurring in a dubious case, with other signs in themselves not final, may serve to clinch a diagnosis. A slight inward alteration of a border anteriorly and posteriorly carefully verified, will raise to a far higher value ambiguous auscultatory signs. Outward dislocation is neither so early nor quite so easy to determine, but if certainly demonstrated has equal value. Dislocation without marked flattening or hollowing of the supraclavicular fossa would seem to depend on lessening of volume from lessened function, while that accompanied by such hollowing or flattening would point to the existence of fibrosis, though only postmortem evidence could verify this assumption.

The Roentgen Ray in the Early Diagnosis of Pulmonary Tuberculosis.—Lehmann and Voorsanger (Am. Jour. of the Med. Scs., Oct., 1906) remark that the early diagnosis of pulmonary tuberculosis is so important, and so far reaching in its ultimate result and benefit to the patient, that every aid at our command should be employed to assure certainty in its incipiency. They plead for the use of the X-ray as a means of diagnosis in pulmonary tuberculosis. The four points most important in beginning tuberculosis often escaping clinical detection, and if discovered by the X-rays, speak most conclusively for a beginning process in the lungs are: (1) Williams' diaphragmatic sign—the lessening expansion of the diaphragm on the side where there is a beginning tuberculous process; (2) the finding of more or less centrally located affections, especially small or more pronounced shadows along the bronchi, which have been explained as, and by autopsy proved to be, peribronchitic tuberculosis; centrally located cavities, which may escape clinical detection, are also brought to light by the Roentgen rays; (3) haziness of the

apex or of the whole lung which anatomically corresponds to thickening of lung tissue; and (4) proof of the existence of peribronchial enlarged glands. In conclusion, they state that the clinical and X-ray findings have agreed in the main; but in the majority of cases the X-rays afforded valuable information as to the extent of the lesions—which were often more widespread than the ordinary cilnical evidences seemed to suggest. Where the diagnosis was in doubt on account of absence or insufficiency of clinical signs, the X-rays showed a peribronchial or bronchial gland affection—the value of which in prognosis, as well as in diagnosis, is of enormous importance. In a few cases, involvement of the apex evident clinically was not recognizable by the X-rays, because recent infiltration, though sometimes sufficient to cause clinical signs may not be sufficiently dense to produce a shadow or haziness on the X-ray plate or screen.

A Case of Rupture of the Heart.—Casassus (Jour. de Med. de Bordeaux, Sept. 9, 1906) details the history of a man seventy-one years old, who sought hospital relief for a generalized eczema. In spite of his age he appeared to be robust. While taking a nap half an hour after his noon meal, he suddenly awakened with extreme pain in his precordial region, began to vomit, the face was pale and the expression evidenced an agitated appearance. The forehead was covered with a sweat and the extremities were cold. There was slight dyspnea and the pulse was small, irregular and sometimes intermittent. The cardiac sounds were completely muffled and there was a certain degree of arhythmia. The patient died at the end of eleven hours. At the autopsy there was found a rupture of the heart muscle on the anterior surface, the tear measuring one and one-half centimeters in length. The pericardium contained a large effusion of blood.

OTOLOGY.

ALBERT F. KOETTER, M. D.

Labyrinth Suppuration.—(Hinsberg, Breslau. Compilation in Internationales Centralblatt fuer Ohrenheilkunde.)— Pathological Anatomy.—Of the different routes of infection to the labyrinth those going out from the middle ear have a practical significance, namely: (a) the existing vascular connection between middle ear mucous membrane and labyrinth; (b) congenital dehiscence in the labyrinth wall; (c) breaking through the labyrinth wall, be it from trauma or inflammatory process; (d) invasion of deep extra dural abscess through posterior surface of pyramid. Of less practical significance, because with them no operative interference comes in question, are the labryinth conditions that arise metastatically through the circulation, for example parotitis epidemica, as also those from the cavum cranii through mediation of the aqueducts or the nerves. With the labyrinth suppurations caused by traumas as fractures of the base of the skull, foreign bodies, injury by shooting, especially those suppurations arising from operative opening of the labyrinth are of interest, be it that labyrinth opening is intentional, as in stapes extraction to improve hearing, puncture of the fenestra rotunda, be it unintentional as in extraction of foreign bodies, middle ear operations.

Most often the labyrinth suppurations arise through destruction of the bony capsule following middle ear suppuration, and indeed less frequent from acute than from chronic (cholesteatomas, tuberculosis). As places of perforation most frequently considered, are the windows, then the promontorium and the horizontal semicircular canal, very seldom the infection comes from the tube or the facial canal. A semicircular canal fistula as place of infection has more favorable prognosis than perforation through the windows, this explains the phenomena that such solitary semicircular canal fistulas are frequently found in the living, but seldom in autopsies. It must be remembered that a part of the gaps or defects may come from a rupture from within, especially is this the case where multiple fistula occur.

Often these perforations, if observed closely, may be discovered macroscopically during the operation, which practically is of utmost importance, because through careful observation of the findings of the operation, under circumstances, disclosures as to the extent of the suppuration and indication as to therapy may be gleaned. The extension of the suppuration in the inner ear may involve the whole labyrinth (diffuse labyrinth suppuration), or on account of formation of protective adhesion limit itself to one part (circumscribed labyrinthitis), both forms cannot absolutely be separated from one another, as the second form may go over into the first, but in practice they are judiciously differentiated from one another, because they demand a different therapy.

Microscopically we find in the early stages an exudate rich in cells, that may change, first, into granulation tissue, then into dense connective tissue, and finally into bony tissue. Besides this there may be ossification of the bone, and in this way cause breaking

through from within. In other cases large portions of the labyrinth frame-work may necrose (labyrinth sequestrium).

Of practical value is the extension of labyrinth suppuration into the skull and this occurs either through destruction of the labyrinth capsule (especially at the superior or posterior semicircular canal) or more often through previously formed paths (spontaneous dehisences, acoustic nerve, aqueducts). By transmisson through the aqueductus vestibuli there appears, first, an empyema of the saccus endolymphaticus, a disease, according to the newer reports, much more common than was previously supposed. All these means of communciation lead into the posterior cranial fossa, a perforation in the middle fossa at the anterior crus of the superior semicircular canal has not been observed to the present time.

Symptomatology and Diagnosis of Labyrinth Suppurations.—The symptoms concern both parts of the labyrinth, the organ of hearing and the static organ, and, namely, as symptoms of irritation (subjective auditory sensation, as vertigo, vomiting, disturbance of equilibrium, nystagmus), or appearance of deficiency (deafness, viz., disturbance of the regulation of equilibrium of a certain kind, absence of physiological nystagmus and rotatory vertigo in deficiency of both sides). It is very difficult to interpret the appearance of deficiency on the part of the static organ where labyrinth disease is unilateral. The test of the nystagmus and rotatory vertigo at present yields uncertain results, therefore an exact test of the equilibrium is in order, namely, static test on a horizontal plane and static test on an oblique plane, dynamic test of von Stein. These symptoms so dominate the clinical picture of labyrinth suppuration that they may be designated directly as labyrinth symptoms. Vertigo may be present in varying degrees, it is strongest in operative opening of the labyrinth. Nystagmus is nearly always present at the beginning of the stage of irritation, but disappears more rapidly than the vertigo, it is mainly horizontal, seldom rotatory. Proof of the presence of static deficiency is often very difficult, sometimes patients rarely notice them, as in the latent stage of labyrinth suppuration he feels well and is capable of working. Fever is absent in uncomplicated labyrinth suppuration; changes in the fundus of the eye abducens paralysis with slowing of pulse indicate infection of cavum cranii.

The course of labyrinth suppuration is sometimes very startling so that between the first appearance of apoplectiform labyrinth symptoms and the death following diffuse meningitis only a short time elapses other cases heal spontaneously, most often the acute inflammation goes into the chronic form, which may exist for years in a latent form, unless the above named test, for disturbance of equilibrium are made, to light up suddenly, as for example in pus retention in the mildde ear, minor operations, as polyp extraction or following extensive operations of the midle ear and leads to final meningitis.

Because of the frequency of such latent suppurations of the labyrinth it is necessary to closely examine each patient on whom a radical operation is to be performed, regarding the static function as well as the hearing the latter through adoption of an aid in hearing for both ears, use of the Lucae-Dennert method, etc. Besides a thorough revision of the labyrinth wall for fistula, is indispensable at the operation, by careful probing and the use of H_2O_2 and adrenalin. If there exists before the operation deafness besides distinct appearance of irritation, deficiency on the part of the static apparatus; at the operation stapes defect we can surmise a diffuse labryinth suppuration. If there exist before the operation symptoms of irritation with relatively good hearing, at the operation semicircular canal fistula we have a circumscribed disease of the semicircular canal. If there exists before the operation symptoms of irritation without proof of labyrinth fistula at the operation, we must if there is deafness proven think of breaking through at the fenestra rotunda or at another place not visible. But if in the same case the hearing has been preserved we are dealing either with a labryinth irritation without infection, viz., through pressure on the stapes, or an inflammatory process in the labyrinth capsule (paralabyrinthitis), or there is present a circumscribed infection of the labyrinth which cannot macroscopically be proven.

In making a differential diagnosis we must remember that labyrinth symptoms may appear temporarily in acute and chronic middle ear suppurations, especially in pus retention, without any infection of the labyrinth being present, similar conditions may be caused by lues and hemorrhage which may accidentally be present in otitis media. Furthermore, the disturbance of equilibrium show very few points of support regarding the differential diagnosis as compared to abscess of the cerebellum, only when after operative opening of the labyrinth the vertigo still persists in undiminished strength for some time, we can with a degree of certainty attribute it to the cerebellum, the same counts for the nystagmus, this may be considered cerebellum nystagmus, when, in the beginning it persists by looking to the

healthy side, suddenly changes to the diseased side. At all events all doubtful cases should be observed for other symptoms of cerebellar abscess (compression of the brain), likewise meningeal symptoms that are usually absent in uncomplicated labyrinth suppuration.

Prognosis and Therapy.—As a considerable part of the untreated labyrinth suppurations lead to fatal complications our efforts should be extended by means of operation to create a drainage outward of the inflammatory products from the labyrinth, and on the other hand, prevent entrance of new infectious material from the middle ear. Although views differed as to whether the opening into the middle ear is sufficient, or if it is necessary to make a free opening into the labyrinth spaces. Whereas interference in the middle ear which stops before the wall of the diseased labyrinth often causes a breaking out of a previously latent labryrinthitis, a compilation of the cases observed by the author and those taken from the literature show that by the opening of the labyrinth spaces the death rate has been materially decreased, and that the operation in itself carries slight danger with it. To be sure we must differentiate the diffuse from the circumscribed labyrinth suppuration relative to the indications in the cases. According to Hinsberg the operative opening of the labyrinth is indicated where (a) before the operation, besides deafness, static irritation or deficiency exist, and at the operation a labyrinth fistula is found; (b) also without presence of a fistula at the operation, if labyrinth irritation symptoms that were present before the operation do not disappear after it, or if these symptoms appear only after the operation. (c) If endocranial complications threaten or are already present. (d) In sequestrium formation, to prevent a meningitis, the necrotic parts should be removed as early as possible. (e) In operative injury to the stapes, as soon as a spread of the infection to the inner ear is probable. The operation is unnecessary in circumscribed suppuration of the semicircular canal, but even in this case the patient is to be watched carefully so that if dangerous symptoms set in the labyrinth should be opened immediately.

Technique of the Operation.—It should be our aim to make a wide opening of the labyrinth, as in incomplete interference (curetting of the granulations at the windows, cauterization, etc.) have been proven by experience to be dangerous. Indispensable consideration in interference in the labyrinth is a thorough topographical knowledge so as not to come in contact with the facial or the carotid. To avoid secondary injury it is

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practicable to work after a certain system, and according to the experience of the author in the following way: after completion of the radical operation with extensive removal of the lateral attic wall and spur of the facial, a fine dental burr is introduced in the fenestra ovalis and removing a considerable part of the lateral wall of the labyrinth to the round window. With this besides the vestibulum the basal convolution of the cochlea is opened. We must avoid a slipping of the cochlea above (facial) or to the front (carotid). Following this the cavity of the cochlea is scraped with a sharp curette. After introducing Bourguet's protector or a bent probe from the oval window under the facial upwards to get the position of the posterior crus of the horizontal semicircular canal and taking away the wall of the semicircular canal from above with the burr, whereby we must avoid slipping downward.

Flow of liquor is regularly absent after opening of a diffusely diseased labyrinth also the absence of vertigo, whereas in destruction of parts of labyrinth still capable of function vertigo, nystagmus post-operation are nearly always observed and during the operation flow of liquor.

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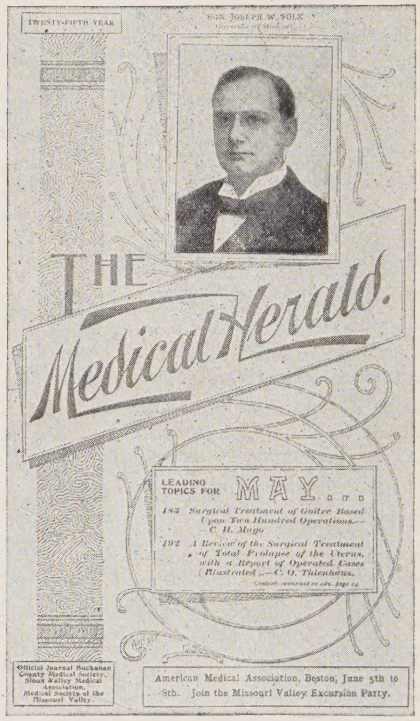
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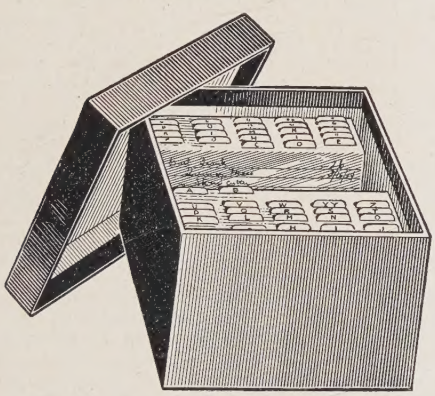
MEDICAL MEMORANDA.

Syrup of Figs and Elixir of Senna.—With a view to making a name of this excellent laxative more expressive, the manufacturers of "Syrup of Figs" have decided upon the above title. In speaking of the subject, Mr. Queen says; "In order to make the name of this laxative more fully descriptive of it, the California Fig Syrup Company has made an addition to the name, as you will see by the new advertisement, and in future, the full name, which will be printed on the wrappers and labels of every bottle, will be "Syrup of Figs and Elixir of Senna," which is what the remedy really is; its special excellence being due to the original method of obtaining the laxative properties of the plant. The original method of the working formula is known to the California Fig Syrup Co. only. We think that the new name will be more acceptable to physicians, as it describes the laxative more fully than the shorter name of Syrup of Figs."

The sample of resinol ointment which came into my hands to-day jogged my memory in regard to your preparations, and reminded me that I have been intending to write you for some time. During the past six months I have twice found it very efficacious. A young lady patient of mine had a very troublesome and unsightly eruption on the back of her neck extending up behind the ears on both sides. She informed me that she had been receiving treatment for it to no effect for over a month and I advised her to use resinol ointment. The result was a cure in a very few weeks, and three months have passed with no recurrence.

Several months ago I extracted some teeth for some boys and their father, and in a couple of days their mouths and chins were covered with eruptions, much to my discomfiture. Prescribed resinol and resinol soap and the recovery was remarkably prompt. I could not account for causes in these cases for I did the work in an antiseptic manner, but will say that I regard resinol ointment as an exceptionally valuable preparation.—A. S. Wolff, D. D. S., 2100 N. 11th St., St. Louis, Mo.

The Card System for Keeping Records and Accounts.—The keeping of records and accounts is a most irksome duty to the active practitioner. No matter how busy or exhausting the day, they still remain to be attended to. Sooner or later they are slighted, and slipshod methods and confusion follow. The "Card System" revolutionizes this state of affairs. It eliminates all the disadvantages of books, and makes each record so comprehensible and easy of reference as to give it a new value. In lieu of the physician's memorandum book, case history book, cash book, ledger, and what-not, the card system substitutes two cards—case history card and ledger card. One card is used for each patient. Impressed with the worth and practicability of these cases, the Angier Chemical Company has developed a complete case, designed especially for physicians, and so arranged as to take care, in the best possible manner and with the least trouble, of his records and accounts. The first of January is the most convenient time to change from books to the card system, and as the Angier Chemical Company (Allston District, Boston, Massachusetts) is making a special advertising offer and low price for these history and ledger card outfits, we advise our readers to write them (mentioning this journal) for sample cards and details regarding their attractive offer.



Hemorrhoids.—(By Elmore Palmer, M.D., Buffalo, N. Y., Ex-President of the Western New York Medical Society.)—Without any comment on the nature, causes, varieties or pathological conditions found existing in rectal ailments, I will transcribe from my records two cases of hemorrhoidal troubles that I have treated within the last two years with glyco-thymoline: Case 1. Mr. B. O. H., age 29, had been ailing several years with what he called piles. A careful examination revealed the following condition: On the margin of the anus were three strangulated tumors about the size and color of a Concord grape. On continued pressure the tumors would empty themselves almost entirely but refill again in the course of an hour. Several similar tumors about the size of a pea were found just inside sphincter. Anal moisture and pruritus vere very troublesome, but singularly enough little pain was complained of. The bowels were somewhat constipated. Regulated the diet and secretions, gave an enema of two ounces of a fifty per cent solution of glyco-thymoline every night and morning quite warm, held in until absorbed, and applied gauze to anus on lamb's wool during the night and as much of the daytime as he could spare from his office. A decided improvement was noted in a week, and three weeks later he was cured. That was nearly two years ago and there has been no trouble since. Case 2. Mrs. R., consulted me regarding "bleeding piles," which had been gradually growing worse for three or four years. At every stool she would bleed two or three tablespoonfuls. She had become quite anemic. No external tumors. A corroding ulcer as large as a

nickle was diagnosed just inside of the internal sphincter. Washed out the rectum three times a day at first with a warm solution of boric acid and then gave an enema of one ounce of glyco-thymoline full strength hot, held in until absorbed. After four doses only two enemas a day were used as no blood was passed. At the end of two weeks time a careful examination of the rectum showed it to be perfectly normal. She was cured. No return after eight months.

Suggestions in the Treatment of Diseases of the Respiratory Tract.—(J. F. T. Jenkins, Ph. G., M. S., M. D., Los Angeles, California.)—A marked advanced in therapeutics has taken place in the last few years and many new remedies have been introduced which after careful clinical tests have been found to be vastly superior to former methods of treatment. A drug which has attracted considerable attention is the new morphine derivative heroin. It has been brought before the profession for the purpose of allaying cough and to take the place of codeine as a more efficient substitute. Its action in relieving cough and dyspnea is much more prompt and decided, and the frequent deleterious after-effects of codeine and morphine—nausea, vomiting, headache, constipation, gastric pains, tinnitus, and visual hallucinations—have never been observed during its administration. Results are equally as good with children as with adults, and it has now taken a permanent place in the armamentarium of the physician. Some time after the introduction of heroin, while I was acting assistant surgeon in temporary command of the station for the United States Marine Hospital Service, I had a number of government patients, sailors of the merchant marine, at the Los Angeles Infirmary (Sister's Hospital) under my professional care. In one case of persistent cough, which was extremely distressing to the patient and harrassing to his friends, I tried everything I had heretofore used, without obtaining even partial relief. The then resident physician, Dr. M. M. Kannon, urged me to try a new combination of heroin with other drugs, known as glyco-heroin (Smith), made by Martin H. Smith Company, of New York. Acting upon upon this suggestion, I gave a prescription for a few ounces of this preparation to be given in teaspoonful doses every for to six hours until relieved. The good effect was immediate and pronounced, and from that time to the present I have had positive results in relieving cough that I had failed to obtain in my previous experience of a quarter of a century in the active practice of the medical profession. Before giving it in the case mentioned I was inclined to be sceptical, notwithstanding the frequency of favorable reports in regard to it by respectable medical journals and leading professional men. I had tried without satisfactory results the usual mixtures, "heroin comp.," of which there are so many without merit, failing entirely to accomplish all that heroin can shown to do in using the preparation indicated. To satisfy myself still further and to remove a doubt in my mind that this might be an exceptional case or a mere coincidence, I was induced to give it a trial in a series of selected cases of a similar character. The result was so satisfactory that I feel constrained to add my testimony to that of others. Glyco-Heroin (Smith) is a true solution of heroin in glycerine; each teaspoonful represents one-sixteenth of a grain of heroin, with ammonium hypophosphite, hyoscyamus, white pine bark, balsam of tolu, with glycerine and aromatics. A glance at this formula shows a happy selection of drugs adding to the palliative effect of the heroin and each possessing decided curative properties of its own. It gives the physician an elegant pharmaceutical preparation, strictly ethical in character, a trial of which will satisfy him that it excels any single drug or combination of drugs in the materia medica. Limitation of space prevents an exhaustive consideration of the individual therapeutic virtues of the ingredients mentioned. With the exception of heroin, all are so well known that a very minute detail of their virtues is not necessary. It is important, however, to notice that the value of each seems to be increased tenfold, and the special sedative action intensified in the uniformly exact proportions adhered to by Martin H. Smith Company in its manufacture. So much for heroin, with a great deal left unsaid which might be justly stated in its favor. The ammonia hypophosphite and hyoscyamus each speak for itself. The peculiar virtues of white pine bark in checking night sweats and in allaying all inflammatory conditions of the bronchial mucous membrane, need only to be mentioned to be appreciated. That pleasant and palatable aromatic stimulant, balsam of tolu, together with glycerine, completes the prescription known as glyco-heroin (Smith), now so well established by the evidence of experience.

The striking and surprisingly good results so uniformly obtained in the administration of this remedy can be fully verified by an unprejudiced trial in which it is tested. Such a trial may be made without hesitation, for notwithstanding its therapeutic advantages it possesses the virtue of absolute harmlessness. When physicians of the professional standing of Francis W. Campbell, M.A., M.D., D.C.L., L.R.C.P., London, Dean and Professor of Medicine, University of Bishop's College, Montreal; and Dr. J. Leffingwell Hatch, late Professor of Laryngology in the New York Clinical School of Medicine, Pathologist to the Philadelphia Hospital and formerly Sanitary Inspector in the Marine Hospital Service, give this preparation their unqualified endorsement, their opinions founded on the actual treatment of a large number of cases, it is apparent that these positive, unlimited, and clear results must gain for this remedy a still fuller recognition, and lead ultimately to its universal acknowledgement as the best remedy of its class for the purposes indicated in these reports and in clinical reports of prominent medical men in England and her colonies, in addition to the favorable testimony of many American physicians from Canada to Mexico and from Maine to California.